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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,043	07/29/2003	Charbel Khawand	CE11194J1211	9272
22917 MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196	7590 05/13/2009		EXAMINER WIDHALM, ANGELA M	
			ART UNIT 2452	PAPER NUMBER
			NOTIFICATION DATE 05/13/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

# Office Action Summary

**Application No.**

10/631,043

**Applicant(s)**

KHAWAND, CHARBEL

**Examiner**

ANGELA WIDHALM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13, 14 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13, 14 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This is a final office action in response to remarks filed on 6 February 2009. No claims are amended, canceled, or added. Claims 13-14 and 18-20 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 13-14 and 18-20 have been fully considered but are not persuasive.
3. Applicant argues Huang and Kim do not describe scaling data and that the terms "scale" and "scaling" are nowhere to be found in the references. Huang for instance describes mapping subjects to numbers in a message and thereby save space in the message (see paragraph 79). Although scaling is not explicitly mentioned, the concept of scaling a message so that the same information is included in messages of different sizes.

### ***Summary of Claimed Invention***

4. The claimed invention relates to an interprocessor communication network in which messages are sent to a recipient based on a filtering table, quality of service requirements, and message priority. The filtering table is used to determine where a message is to be sent based on message type. The server and client are able to negotiate the contents of the filtering table. There is also a buffer that temporarily stores

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messages to be sent. In which, in the same field of endeavor, the applied references teach the same.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13-14 and 18-20 are rejected under 35 U.S.C. 103(a) as being anticipated by Huang et al. (U.S. Patent Publication 2004/0073701) in view of Kim et al. (U.S. Patent Publication 2002/0078196), hereafter referred to as Huang and Kim respectively.

7. Regarding claim 13, Huang disclosed an InterProcessor communications (IPC) network, comprising:

an IPC stack having a presentation manager (see fig. 7, [0063]-[0064], [0108]: *The agent translates data structures into a form readable by the next network element*), a IPC session manager (see fig. 7, [0063]-[0064]: *The libraries log events, cache data, and store channels and assignment information*) and a device interface layer (see fig. 7, [0063]-[0064]: *The dispatcher library also provides connections to other network components*);

a component coupled to the IPC stack, the component being assigned a channel based on a Quality of Service (QoS) (see fig. 7, 17, [0009], [0011], [0133]: *channels are selected based on quality of service requirements*);

an IPC scheduler coupled to the device interface layer; (see fig. 7, [0072], [0074]-[0075], [0085]: *channel manager is connected to the dispatcher library. Additionally, routing may occur at the application or kernel layer*)

wherein the IPC scheduler is responsible for providing the QoS assigned to the channel; and (see [0060], [0082], [0085], [0133]-[0134]: *channel managers select channels and ensure that the quality of service requirements are met*)

a channel buffer coupled to the channel, the channel buffer storing data that is to be sent via the channel (see fig. 14, [0056], [0073], [0103]-[0104]: *caching data*).

Although Huang did not explicitly disclose wherein the IPC scheduler chooses enough data from the channel buffer to support the data rate required by the channel and scales the data that the IPC scheduler picks from the channel buffer depending on a size of an IPC frame that is used by the IPC scheduler, Huang did disclose publishing content in accordance with channel attributes, including formatting packets according to channel attributes and message size (see paragraphs 78-79 and 82, table 6, and figure 14). Huang also disclosed routing packets based on the quality of service guarantee for the packets (see paragraph 11). It would have been well-known and obvious to one of ordinary skill in the art at the time of invention that a specific amount of data must be

sent so as to be able to achieve a guaranteed quality of service and also that scaling data to be sent is functionally equivalent to formatting packets.

However, applicant is also directed to analogous prior art Kim paragraphs 6, 30, and 34-37 and figures 4 and 5. Kim described storing packets in buffers according to packet QoS requirements and forwarding the packets based on the QoS requirements. This includes scaling and selecting data to meet the QoS requirements. Both references Kim and Huang described routing packets based on quality of service (see Kim abstract, Huang abstract). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Huang and Kim to provide additional details regarding how packets are formatted and routed in order to achieve the common goal of guaranteeing levels of service quality.

8. Regarding claim 14, Huang-Kim disclosed wherein the IPC scheduler secures a data rate required by the channel (see Huang [0009], [0133]: *bandwidth is assigned based on quality of service*).

9. Regarding claim 18, Huang-Kim disclosed wherein the IPC scheduler chooses the data from the channel buffer depending on a priority level of the channel (see Huang [0009], [0138]: *priority routing for real-time alerts*).

10. Regarding claim 19, Huang-Kim disclosed wherein the channel assigned to the component is based on a QoS level required by the component (see Huang [0134],

[0139]: *the data packets generated for the customers with the highest quality of service requirements are routed to the link with the highest bandwidth).*

11. Regarding claim 20, Huang-Kim disclosed a port coupled to the component wherein the QoS is valid only when the component is using the port (see Huang [0134]-[0135], [0138]-[0141]: *Channels are assigned to specific ports. The quality of service will be higher when sending messages on a higher bandwidth channel. When a lower bandwidth channel is used instead, the quality of service is different and the quality of service that was previously obtained on the higher bandwidth channel is no longer valid).*

### **Conclusion**

12. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure

relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA WIDHALM whose telephone number is (571)272-1035. The examiner can normally be reached on M-F, 9-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenny S Lin/  
Primary Examiner, Art Unit 2452

/A. W./  
Examiner, Art Unit 2452  
23 April 2009